POVERTY AND STUDENTS’ ACADEMIC ACHIEVEMENT IN PAPUA, INDONESIA

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Abstract
Poverty in Indonesia has experienced a continual decrease in the last decades. However, the numbers of people living under the poverty line in the country are still constant at above 10 percent. The study intended to review the influence of poverty on students' academic achievements in Papua. The study aims to explore the measurement of poverty, types of poverty, poverty and its effect in Papua, how poverty affects students’ academic achievements, and possible recommendations. Some research studies have found how poverty negatively disturbs the students’ academic achievements. The results indicate that poverty affects students’ academic achievements in Papua and even leads them to school dropout. Becoming one of Indonesia's most impoverished regions with a high poverty rate, the academic achievement among students in Papua is highly correlated with poverty, health and safety issues, food security, parental behaviour, acute, chronic and stressor, and social and emotional challenges. Such situations later decrease their academic achievements in school.

Keywords: academic achievement, Papua, poverty

Introduction
Periodically, many people claim that educational score is not broadly due to teachers’ contribution in teaching the students in the classroom. Instead, home environment and circumstances, especially poverty, plays a significant role. As a developing nation, poverty is a growing issue in Indonesia. The percentage of the Indonesian population living under the national poverty line is still high. Poverty imposes challenges for students in Indonesia, especially in Papua, such as accessing a better health facility, health family environment, nutrition, and even secure foods that result in their academic achievements. According to McKenzie, (2019) poverty is the major factor that contributes to student academic achievement all around the world. Some studies have found the correlation between children living in poverty and their low academic achievement. There are dozens of factors contributing to students’ low academic achievement, but poverty is the most influential factor. Poverty plays a tremendous role in students’ academic achievements in all the students’ learning years (Kapur, 2018; McKenzie, 2019).
Furthermore, family outcomes, no matters high or low can directly create the environmental impact on the students learning. Children coming from a poor family have obstacles to learn as fast as their peers. Children learn vocabulary at their home, but vocabulary learned by students coming from high-income families are much more than students from low-income families. Then, the way students learn and comprehend are different from other students as their families may not assist them at home or they only have a single parent (Yawan, 2022). When parents do not have sufficient money, they have to work all the day for the children, which there will be no time for the parents to give their children assistance in doing their homework. Poverty provides numbers of challenges for children such as in accessing better health facilities, education, nutrition, secure foods, and employment one of the most important things is the stress that the children and their parents may have at home (Miller, Votruba-Drzal & Coley, 2019). These will give a direct impact on their grades because nobody wants to help them or even, care about their success in schools (Grinion, 1999; Unity et al., 2013; Fortner et al., 2021). Therefore, the main focus on the analysis of this study is to identify how poverty affects students’ academic achievements in schools in Papua. In this case, the writers provide the research questions to be investigated in this study. 1) What is the current condition of poverty in Papua? 2) How does poverty affect students’ academic achievement in Papua?

The study is organized into an introduction, methods and other topics including, measurement of poverty in Indonesia, poverty in Papua Indonesia and its effects, how poverty affects students’ academic achievements, conclusion and recommendations.

Method

To gather and analyze the data, this research used synthesis research. This method of research is undertaken by synthesizing any relevant studies to make conclusions (Onwuegbuzie, Leach, & Collins (2011). In this research, therefore, the actual empirical research investigating the issues of poverty and academic achievement were carefully analyzed and synthesized to draw the links between poverty and students’ academic achievements in Papua. The studies relating to the effects of poverty on academic achievements were collected from three main reliable sources that are ERIC Journal, Google Scholar and Scopus. To find relevant studies, the researchers employed the aid of Boolean operators such as AND, OR, and NOT to specify the focus of the search. Also, the specific keywords regarding the notions of Poverty, Papua, Indonesia, and Academic achievement were carefully used to collect relevant articles. Only peer-reviewed articles were listed. However, the researcher found limited studies regarding the issues of the poverty and academic achievement in Papua. Thus, to enrich the data, some online sources from online news, official ministry website, UNESCO website, UNICEF website were taken as secondary data to support this investigation.

Finding and Discussion

Measurement of Poverty in Indonesia

Poverty can be defined in either absolute or relative term. Absolute poverty is defined as minimum requirements needed in affording minimum foods standard, clothes, health care, and housing (Apergis, Polemis, & Soursou, 2022). They also
argue that absolute poverty has the same meaning with extreme poverty which is used to measure the main demands for survival utilised in developing nations or lacking a minimum standard of living that is utilised in rich nations (Apergis et al., 2022). Meanwhile, relative poverty is defined as the measurement of a family’s income which is inadequate to meet the communities’ standard of living (Oulhote & Grandjean, 2016). However, dozens of different approaches to measuring poverty have been used and presented. It frequently can be calculated by placing an applicable income poverty line at the level between roughly 40% and 70% of the domestic’s median income (UNICEF, 2017).

There are various interpretations in classifying what human condition categorised as being in poverty. Such conditions also can be influenced by many aspects not only national standards of living, but also resources, and people perceptions of what is fundamentally acceptable. A family can be considered to be in poverty if the money earned by the family for 12 months is below the threshold number assigned the family according to its size (Andriaswati & Utami, 2022; Oulhote & Grandjean, 2016). They added that people are categorised as poor if they are not able to get access to what is commonly considered to be a reasonable standard and quality of life. Meanwhile, Yawan (2022) argues that people are categorised living in poverty when they could not participate in the activities and do not have good living conditions, unable to obtain the resources in the communities to which they belong. He added that people are in poverty when these resources are so dangerously below those administered by the average individual or family that they are affected and excluded from usual living conditions, customs and activities. Furthermore, according to Andriaswati & Utami, (2022) people are in poverty when they lack a standard or lack socially acceptable amount of money or material possessions and lack of satisfaction on their everyday basic needs.

As a developing country, Indonesia still struggles to fight poverty. Indonesia’s economic growth ranging from 5.3% to 5.9 % since the year 2010 has assisted millions of Indonesians out of poverty. According to statistics of Indonesia (2017), approximately 28 million of Indonesians were still living under the national poverty line. It is important to note that the measurement of poverty is different across countries. According to the World Bank, one of the measurements or indicators of poverty is the income measure. In Indonesia, poverty is generally associated with the percentage of the Indonesian population living on less than USD $2 a day (Statistics of Indonesia, 2016). In other words, the government of Indonesia determined the poverty line at a monthly per capita income is IDR 354,386 or just a little over USD $25 per month. If the government applied the international poverty line of not less $2 a day, then 40% of Indonesian would be categorised as poor. One of the factors that contribute to poverty in Indonesia is the income gap (Jakarta post, 2016). The reality nowadays shows the income gap has widened between Indonesian families. According to Jakarta post (2016), ten percent of wealthier in Indonesia own roughly 77 percent of the country wealth in which 40 percent of them live and originate from Java Island.

Papua that lies in the eastern part of the Indonesia archipelago has international recognition as one of the resource-richest places in Asia. However, while most of the Indonesian population live in Java and Sumatera Island, poverty in this region is still inevitable. With some difficulties in access and a huge part of remote and isolated areas, Papua comes with the highest percentage of its
population living below poverty. According to Statistics of Indonesia (2016), the eastern part of Indonesia (Papua) shows the worst numbers of Indonesia with high-rate of poverty if compared to other regions in Indonesia such as Java Island, Sumatera or Kalimantan (Borneo) with nearly 30% of its population is in poverty which is even much higher than the national level. The role of infrastructure development, divers of inequality and unequal opportunity, and lack of protection in Papua are some factors that seem to contribute to the high rate of poverty (Andriaswati & Utami, 2022; Susanto & Wulandari, 2021).

**Poverty in Papua and Its Effects**

Poverty has become a growing issue in Indonesia especially in the eastern part of Indonesia. According to Hasibuan, Hariani, & Pratiwi, (2021) a number of Papuan people living in poverty are the highest if compared to other regions in the country. Also, the percentage of children live in poverty is higher than children live in a wealthier family. We all know that there is a strong relationship between poverty and the academic achievements of students. A study conducted by Bergeson (20016) found that 43.5% of students who live in poverty were unable to successfully score based on required subject area assessments and only 13.2% of students who are coming from low-income families scored based on the required subject area assessments. Another study in China, conducted by Xiao (2012) measured the children achievement in school and their family incomes. The result of the study showed that numbers of chosen children with high family incomes performed much better than students from low family incomes (Zhang, 2012). Students who live in poverty continually score below norms regardless of ethnicity or race (Bergeson, 2016). Poverty can create a huge effect on achievement despite the fact that it is a hard identifiable variable as it involves with social status (Hasibuan et al; Welch, 2013).

Another effect of children coming from a low socioeconomic status is they experience high rates of school dropout (Bergeson, 2016). In 2012, over 44.3 children lived in poverty and roughly 2.5 million children in Indonesia aged between 7 to 15 years old were drop out of schools due to economic and inequality problems (UNICEF, 2012). Brownfield, Thielking, Bates & Morrison (2020) argue that financial difficulties were the major issue for lack of success in education among the children. For example, a student named Teo from Papua was interviewed by an Education Specialist for UNICEF in 2016 about the reason why he was dropped out of school. A nine-year-old Teo simply answered that he rarely went to school because his parents were very poor, so he had to work to help his family for a living. A recent survey in 2016 showed that in Papua alone, there were over 50 percent children drop out from schools and approximately 50% of them were students from secondary schools in Papua (UNICEF Indonesia, 2016). Many students also do not successfully meet the subject’s requirement or performed below average especially in the exam. As a result, approximately 30% of students in Papua were unable to finish their secondary schools (UNICEF, 2012).

There are some factors that contribute to a high-poverty rate in Papua and one of the major issues is social inequality among various regions in Indonesia. Most of the investments and budget development in Indonesia are highly concentrating on Java Island which causing rising inequality between Java and the outer islands known as Jawa-Sentries (Indonesian language). Inequality distribution can keep
people in Papua from accessing the tools, basic social services and resources in supporting their needs. A number of districts, sub-districts, and villages are geographically isolated, especially for those who are living in the highlands and mountains. They lack access to healthcare, clean water, sanitary environments, foods security and even education. According to Statistics of Indonesia (2016), in Java Island especially in the Greater Jakarta and Surabaya, contribute approximately 60 percent to the total Indonesian economy. Moreover, a World Bank in 2015 informed that there are 80 percent of Indonesia’s population (where more than a half are from eastern Indonesia), could not have the benefit of fruits in the last ten years which means that 200 million Indonesian population are still left behind.

Despite the fact that some scholars keep debating whether the correlation between poverty and students’ achievements are ethically strong or causal, the relation between poverty and academic achievement is strong and consistent (Miller, Votruba-Drzal, & Coley, 2019). Therefore, poverty is a global phenomenon, and widespread of this social phenomenon happens in Papua which is also inevitable. A large body of research has reported the various impacts of poverty on children health, cognition, socio-emotional, functioning, and academic achievement (Miller et al., 2019; Purwono et al., 2021). Poverty in Papua, Indonesia, cannot just be defined as insufficiency of welfares instead poverty in Papua is very complex and involves insufficient outcomes such as health and safety issues, bad environments, emotional and social challenges, foods insecurity and acute and chronic stressor (Grainger, 2014).

How Poverty Affects Students’ Academic Achievements

The following are some risk factors of poverty that has an impact on the secondary students’ academic achievement in Papua, Indonesia.

**Health and safety issues in Papua**

Family living in poverty is directly associated with child development where poverty can seriously damage health problems for children. They frequently become subject to insufficient health care, environmental risks, and even poor nutrition. In Indonesia, especially Papua, many children still suffer from lack access to clean water and proper sanitation, breastfeeding practices, and general nutritional condition (UNICEF, 2012). Thus, such conditions make school-aged children (7-12 years old) vulnerable to asthma, flu, cough and fever, as well as diarrhoea. Research was showing that the status of poverty on the children was linked with the high number of children’s school absences and illness as a consequence of health and safety issues. Miller et al., (2019) talked about the effect poverty on children health issues which cause the delays in children's language development and children often are not covered by health insurance. He added that in America for instance, children are unable to attend 21 million days of school every year due to inadequate health care and asthma, and those children are from low-socioeconomic backgrounds.

Children living in poverty have commonly physical health problems than children from high-income families. There is a greater incidence of such situation as asthma, the infection of tuberculosis, respiratory disease, obesity and even hearing loss (McKenzie, 2019). According to UNICEF (2017), there are 26
provinces out of 33 provinces in Indonesia with a high rate of health and nutrition problem, and Papua is on the list even in the top five. Although the Indonesian government has made several important attainments in reducing the rate of health problems on children, however, the reduction is not evenly administered across the regions. Indeed, the evidence showed that in Papua, these diseases mainly occur on children from poor income households both in rural and urban areas. This can absolutely affect the children learning outcomes due to health and safety issues. Indeed, children who live in poverty are more likely to get poor health and be susceptible to illness and hunger. They also have worst cognitive developments if compared to children who are not living in poverty which make them unable to participate in school activities.

**Family’s environment**

Family’s environment certainly contributes to their children academic achievement especially those who live in poverty (Garrett et al., 2016). Some families and communities with low-income, do not pay attention much to the importance of education. They mainly do not notice the value of formal education for their children. As a consequence, this makes the children becoming unprepared with the schools’ situation and the environment. Moreover, a family who is in poverty status are not well-educated which make their children are not adequately served. This is how it looks in Papua. Many parents in Papua are unable to finish their secondary schools and even have no schooling. They are mostly illiterate, so they do not have a deeper understanding of what sort of educations needed by their children. According to UNICEF Indonesia (2012), Papua needs a crucial attention the region has the lowest percentage of parents enrolled at both junior and high secondary levels. Some studies have shown that well-educated families have a much easier time to get their children more prepared for school than families with no educational background (Tripp, 2011; Lacour & Tissington, 2011). There is a correlation of parents’ level of education to their children academic achievements. Parents with high education levels can assist their children in school work activities and can ensure children’s enthusiasm in their studies (Yawan, 2022).

Despite the education level of their parents, the children in Papua also are expected to work in the fields during harvest time. Indonesia has some four million children engaged in child labour with approximately 30 percent are children from eastern Indonesia, Papua. They have to work six to seven hours a day to meet their basic needs/foods. Children who spend their time by working may lose part of their learning time. This seriously affects their academic achievement (Sofilda, Hamzah & Sholeh, 2014). Almost two-thirds of out-of-school children ageing 10-14 years old are engaged in some productive activity (Keamey, 2017). Since they are born with in farming and agriculture-based communities, farming and hunting is their primary livelihood. They are working all the time to provide income for their families. In the harvest time, the children are not going to school instead parents are using their children as a mean of labour by helping them with the work in the farming in order to provide additional income for the families. They mainly work for 1 to 3 months during the harvest time. Children who spend most of their time on working potentially have roughly 30 percent lower possibility to attend school than children who do not (UNICEF Indonesia, 2017).
Emotional and Social Challenges

Many children who live in poverty, emotionally and socially are unstable. Children need healthier learning and exploration to shape their emotional and brain development in order to work optimally. Unfortunately, poor families are likely to be a greater predominance of such unfavorable conditions as teen motherhood, depression and inadequate health care which results the decrease of sensitivity toward the children and later poor school achievement on the child’s part (Yawan, 2022, McKenzie, 2019). This means that children who raised in poverty are more likely to experience depressive symptom which lasting on their academic competence in the school.

Strong, and secured parents at home can assist to shape the children’s development regarding their behaviour and social skills. Children growing up in such situation are more likely, on average, to experience a healthy learning environment and appropriate emotional every day interactions. For instance, children growing up with emotional dysregulation are more likely to get a range of negative outcomes such as frustration, and later they become easily to give up on assignments when they just one step away to finish it. Such condition will interrupt students’ social skill to dependently work with certain communities or groups, and lead them to be excluded by the community members who believe that they are not even “making any contributions” or “pulling their share of load”. This rejection and the attendant decrease in cooperation and exchange some pieces of information causing it to become worse. Then, the children are placed at risk that they are already shaky academic achievement (McKenzie, 2019).

Food Insecurity

Food insecurity is absolutely a threat to students’ success in school and potentially affects their academic achievement. Family living in poverty mainly has to sacrifice stock of foods that they have and restrict the frequency of meals due to food insecurity. According to Ginting et al., (2020) food insecurity simply is a situation in which a family has insufficient access to healthy nutritious foods. The fact that the majority of children in Papua region do not have access to sufficient and healthy foods and the food available in the region is limited. That is why Papua under the government of Indonesia, is categorised as the most vulnerable region in the country with high rate of food insecurity due to poverty (Ginting et al., 2020). Limited access to foods in Papua is due to poverty such as low incomes, unstable of employment and limited purchasing (World Food Program, 2013). It is also reported that there is approximately 28 percent of children are stunting (growth) and 16 percent of them are under-weigh due to food insecurity or poor nutrition. Furthermore, the local government reported that there are approximately 23% of the population in Papua are not able to satisfy their energy needs for 2,100 calories a day.

A study conducted in the USA found that 14.5 percent of households experiencing food insecurity have a greater impact on their children college attendance (USDA, 2013). Food insecurity can impact negatively both secondary and high schools’ students’ outcomes (Paschall, Gershoff, & Kuhfeld, 2018). As a consequence, children who are food insecure along their lifespan are likely to attend schools or colleges in fewer numbers than children who are not. Indeed, food insecurity determines students’ academic achievements or success in both
elementary and secondary schools as some researchers have pointed out that students who live with food insecurity are frequently unable to achieve at same score as their peers who live with food secure (Paschall et al., 2018).

**Acute and Chronic Stressor**

Stress can be defined as the physiological perception of pressure, and the body responds which resulting from an adverse situation. Having stress can be beneficial for people as it improves our immune system and develops resiliency to function optimally. Nevertheless, acute and chronic stress that students living in poverty have may cause a devastating effect on their life. Acute stress is a psychological condition that refers to anxiety or behavioural disturbances resulting exposure to trauma or violence. Meanwhile, chronic stress is a high stress for an extended time. Children living in poverty become more subject to acute and chronic stress than their affluent peers; they are more likely to experience a significance chronic stress than children with high socio-economic status (McKenzie, 2019). Children in Papua who live in poverty frequently experience disruptive or traumatic events as a result of negative parenting. According to WFO Papua, stunting prevalence (or chronic) among children in Papua is 28% while wasting (acute) is high, approximately 13.8% (Riskesdas 2010). The level of family income of children is positively linked with good parenting which some studies found can increase the academic achievement of children (McKenzie, 2019). Children living in poverty in Papua, are commonly neglected by their family as their parents spend most of their time by working and hunting. Parents do not have time and energy for their children who later impair children psychological and emotional development.

**Conclusion**

Poverty creates numbers of negative effects on children academic achievements. It also may significantly affect the children academic achievement in Papua Indonesia. Children living in poor families are more likely to experience some potential problems in schools than children who grow up in middle or upper-class families. With a number of students experiencing school drop-outs in Papua means that the main reason for being unable to finish their studies are low academic achievements as a result of poverty its self. As the poorest region in the country, it is difficult for families in Papua to escape from poverty and their children become the victim of such situation. Poverty puts the children at a greater risk which impair the resources that they have such as emotional, mental, health and brain development which later affect their academic success. In other words, a problem brought by poverty creates another, which after that contributes to another one, resulting in apparently not stopping effects.

While social environment, health and safety issues, foods insecurity, acute and chronic stressors are the risks factors of poverty that affects children academic achievements and in light of the aforementioned conclusions. The study recommends that the government of Indonesia have to focus on the development of new economic growth centres not only Java island, but also the outer islands especially Papua in order to reduce inequality (structurally) among the various regions. The government also should combat the poverty by reducing income distribution inequality among regions. In addition, the government of Indonesia need to subsidise free basic healthcare or expand the infrastructure by providing
more hospitals, health centres and nursing homes in the region with high rate of poverty. Healthy lifestyles is expected may lead to higher incomes. Moreover, providing social protection for those who are living under poverty line as it is a core part of development policy to fight poverty and improve equity. At family levels, parents should spend their time 10 to 20 hours every week to build up emotional relationship and interactions with their children. The also should provide a strong consistency, reliability, and unconditional guidance, affection, love and support for their children.

References


